

An E-Update

Prepared by Organizational Results
Missouri Department of Transportation

April 2010

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First Diverging Diamond Interchange Rates #1 With Drivers

When MoDOT cut the ribbon on the diverging diamond interchange at Interstate 44 and Route 13 in June 2009, it became the first of its kind in the U.S. The innovative design earned the designation as one of the top 100 innovations of the year from *Popular Science* magazine. But what do Springfield area drivers think about driving the new intersection? A recently completed survey gave the intersection high marks for making the roadway safer (96.7 percent), less congested (95.2 percent), easier to drive (86.9 percent) and being better marked (89.8 percent). Overall, most Springfield area residents said they were very satisfied with the project and generally believe it was the right transportation solution (89.4 percent). Merge right to the project summary for more details. [DDI Survey Summary](#)

Freeway Motorist Assist Program Benefits Confirmed

The largest construction project in department history provided the perfect testing grounds for assessing the benefits of the Motorist Assist program. With the closure of more than 10 miles during the construction of the New I-64 in St. Louis, keeping 170,000 vehicles moving each day would require a focused approach. The Motorist Assist program proved to be a vital component in handling traffic incidents quickly and efficiently. During the I-64 closure, the Motorist Assist program delivered a benefit-cost ratio of more than 38-to-1, reduced an estimated 1,082 secondary crashes per year and reduced more than \$1 million in annual congestion costs. You have a free way to more information in the summary and report. [I-64 Freeway Motorist Assist Report](#) [I-64 Freeway Motorist Assist Summary](#)

Northeast District Sees Significant Reduction in Utilities

Thanks to a challenge issued by district leadership, the Northeast District significantly reduced its utility use in 2009. The district's Utility Challenge grouped teams within work locations to implement strategies to reduce the use of water, gas, electricity and propane. Winning teams received a trophy, paid leave and lunch. Although the district narrowly missed its 10-percent reduction goal, three teams were able to reduce usage by more than 40 percent. The most effective energy saver was to stop heating the hot oil tanks when not in use. Put a charge in your energy saving efforts with the results of the challenge.

[Northeast District Utilities Challenge](#)

Citizens Support MoDOT's Transportation Solutions

Results from a recent survey show that most Missourians are very satisfied with local transportation projects. The majority of respondents thought local projects made the roadway safer (95.7 percent), more convenient (94 percent), less congested (84.4 percent), easier to drive (95.2 percent), better marked (93.9 percent), and was the right transportation solution (95.4 percent). Overall, results were slightly higher than the previous year's survey. Survey all the responses in the full report. [Right Transportation Solution Survey](#)

Adaptive Traffic Signals Benefit KC Area

According to the Midwest Research Institute, adaptive traffic signals in Lee's Summit are keeping traffic moving and reducing fuel consumption. The 12 interconnected signals were installed on a 2.5 mile stretch of Route 291 in March 2008. Computers adjusting traffic signal timing based on actual traffic volumes have reduced travel times through the corridor by up to 39 percent and reduced stops by as much as 95 percent. Don't stop now. Read the complete traffic study and analysis. [Adaptive Traffic Signal Report](#)

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MoDOT Goes High Tech to Place Water Monitoring Systems

Faced with the possibility of having to place water quality monitoring systems on hundreds of locations across the state, MoDOT turned to its research partners at the University of Missouri-Columbia to develop a computer assessment tool to reduce the number of sites. Federal regulations soon may require MoDOT to place water quality monitoring systems at locations where runoff from the state highway system might affect a designated list of water bodies across the state. However, not all highway crossings meet the requirements for needing a monitoring system. Using existing GIS data, MoDOT now has a decision tool that will significantly reduce the number of monitoring systems required while maintaining environmental responsibility. The report is ready to stream your way.

[Water Quality Monitoring System Report](#)

Slopes Don't Negate Safety of Median Guard Cables

A recently completed study by MoDOT concludes that median guard cables are a good safety measure even on slopes greater than 6-to-1. This project further confirmed a 2006 study by examining a larger amount of data from crashes on Interstate 70. A total of 521 survey forms representing the 521 identified crash sites were distributed to regional staff to collect median and crash data. Overall, median guard cable was an effective safety measure with an average of 95.6 percent success rate in preventing vehicles encroaching into opposing lanes along I-70. The success rates for guard cables installed on both steeper and flatter slopes are pretty high, with 98.1 percent for steeper slopes and 93.9 percent for flatter ones. The fact that guard cable success rate for steeper slopes is not any lower than the rate for flatter slopes showed that median slope does not solely affect guard cable effectiveness. Other factors (e.g., crash speed and collision angle) also contribute to the success or failure of median guard cable in keeping vehicles from encroaching into the opposite lane. Play it safe and link to the report. [Median Guard Cable Summary](#)

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